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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/472,401	12/27/1999	MASAHIRO SUEYOSHI	YAMAP0689US	8682

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EXAMINER

AN, SHAWN S

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 12/31/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/472,401

Applicant(s)

SUEYOSHI ET AL.

Examiner

Shawn S An

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,9,10 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,9,10 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

1. As per Applicant's instruction in Paper 8 as filed on 10/17/03, claims 1-2 and 10 have been amended.

Claim Objections

2. Claim 10 is objected to because of the following informalities:
On amended claim 10, "(Original)" should be changed to "(Currently Amended)".
Appropriate correction is required.

Response to Remarks

3. Applicant's arguments with respect to claims 1-2, 6, 9-10, and 13 have been considered but are moot in view of the new ground(s) of rejection using the same reference as the previous Office action.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Huang et al (5,617,145).

Regarding claim 2, Huang et al discloses an encoding device, comprising:

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an encoding section (Fig. 1) for generating bit streams having a variable frame length from an input audio signal, a maximum frame length of the bit streams being fixed (Constant Rate);
a storage section (11) for storing the bit streams generated by the encoding section; and
a transfer section (Fig. 4, 21, Fig. 5) for transferring the bit streams at a changeable (variable) transfer (bit) rate (Audio Bitstream),

wherein the storage section includes a buffer having a capacity corresponding to at least a value which corresponds to maximum frame length (max bit stream generated in one frame time period) (Fig. 9, Bfmax),

wherein the encoding section generates a bit stream so that a sum of an amount of the bit streams stored in the storage section at the moment when the bit stream for one frame time period are generated (Fig. 9, 2Td) and an amount of the bit stream for one frame time period (Td) is equal to or less than the capacity of the storage section (Fig. 9, Bfmax).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 6, 9, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al (5,617,145)

Regarding claims 1, 6, and 10, Huang et al discloses an encoding device, comprising:

an encoding section (Fig. 1) for generating bit streams having a variable frame length from an input audio signal, a maximum frame length of the bit streams being fixed (Constant Rate);
a storage section (11) for storing the bit streams generated by the encoding section; and

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a transfer section (Fig. 4, 21, Fig. 5) for transferring the bit streams at a changeable (variable) transfer (bit) rate (Audio Bitstream),

wherein the storage section includes a buffer having a capacity corresponding to at least a value which can be obtained by subtracting an amount of the bit streams transferable in one frame time period (Fig. 9, T_d) at a minimum possible transfer (bit) rate (Fig. 3) from a value of the maximum frame length (max bit stream generated in one frame time period) (Fig. 9, B_{fmax}).

Huang et al does not specifically disclose the storage section having the capacity of twice the maximum frame length.

However, the Examiner takes official notice that expanding or doubling the size of the encoder storage device is conventionally well known in the art for storing/accommodating additional bit streams.

Furthermore, the Examiner takes official notice that the decoding device decoding the compressed audio/video data is obviously well known features for reverse processing the encoding device for displaying the compressed data.

Moreover, Huang et al discloses bit rate determination module (Fig. 5, 106) for determining maximum transfer bit rate.

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing an encoding device as taught by Huang et al to incorporate the well known concept of expanding or doubling the size of the encoder storage device so that the storage section has the capacity of twice the maximum frame length for the well known reason of storing/accommodating additional bit streams or a bit stream accumulating section having the capacity of at least a value which is obtained by multiplying the maximum frame length with a value obtained by dividing the maximum transfer rate divided by minimum transfer rate so as to avoid a buffer overflow.

Regarding claim 9, Huang et al discloses a transmitter (Fig. 1, 14) for transmitting the bit streams. Further, the Examiner takes official notice that a receiver is considered an obvious feature for receiving the bit streams, and decoding the compressed audio bit streams.

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Regarding claim 13, Huang et al discloses an audio bit stream (Fig. 1, 3).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number (703) 305-0099 and schedule are Tuesday-Friday.


SSA

SHAWN AN
PATENT EXAMINER

December 24, 2003


CHRIS KELLEY
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